

Future Trends in Small Missions and the Need for Microtechnology

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ABSTRACT

During the next decade, the trend will be to emphasize small missions which can be implemented rapidly (2 to 3 years) and are affordable, but still scientifically exciting and publicly engaging. These seemingly contradictory objectives could be accomplished by relying on new advanced technology, particularly microtechnologies that allow significant capability in a low volume/low mass spacecraft.

In this talk I will review some of the most engaging planetary and earth missions which would significantly benefit from microtechnologies and discuss the needs in the areas of remote and in-situ sensors, spacecraft subsystems and rovers.